

Title (en)
Substrate processing unit

Title (de)
Substratbearbeitungseinheit

Title (fr)
Unité de traitement de substrats

Publication
EP 1215715 A3 20060628 (EN)

Application
EP 01120274 A 20010823

Priority
JP 2000377785 A 20001212

Abstract (en)
[origin: EP1215715A2] A substrate processing unit 10 capable of restraining contaminants such as particles, watermarks and the like from being adhered to a substrate such as a semiconductor wafer and the like, wherein the substrate processing unit 10 comprises a processing bath 11 for accommodating the substrates (e.g., wafer W) to be processed, a processing fluid introduction pipe 21 for supplying processing fluid (e.g., purified water J) to the processing bath 11, a vapor generating bath 61 for accommodating an organic solvent S (e.g., IPA fluid), a processing fluid discharge section 30 for discharging processing fluid from the processing bath 11, and a solvent heating unit 62 for heating the organic solvent S inside the vapor generating bath 61, wherein the vapor generating bath 61 introduces vapor generated from the organic solvent S to the inside of the processing bath 11, and the solvent heating unit 62 heats the organic solvent S inside the vapor generating bath 61 at a temperature in the range of 50°C±5°C if a surface of the wafer W is hydrophobic and heats the organic solvent S at a temperature in the range of 70°C±5°C if the surface of the wafer W is hydrophilic.

IPC 8 full level
B08B 3/08 (2006.01); **H01L 21/00** (2006.01); **B08B 3/00** (2006.01); **H01L 21/304** (2006.01); **H01L 21/306** (2006.01)

CPC (source: EP KR US)
H01L 21/304 (2013.01 - KR); **H01L 21/6704** (2013.01 - EP US); **H01L 21/67057** (2013.01 - EP US); **Y10S 134/902** (2013.01 - EP US)

Citation (search report)

- [A] GB 2183552 A 19870610 - CFM TECHN RES ASS
- [A] US 5078832 A 19920107 - TANAKA MASATO [JP]
- [A] US 4984597 A 19910115 - MCCONNELL CHRISTOPHER F [US], et al
- [XA] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08 30 June 1999 (1999-06-30)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1215715 A2 20020619; **EP 1215715 A3 20060628**; CN 1194392 C 20050323; CN 1359142 A 20020717; IL 145001 A0 20020630; JP 2002184747 A 20020628; JP 4602540 B2 20101222; KR 100804911 B1 20080220; KR 20020046140 A 20020620; SG 122742 A1 20060629; TW 502332 B 20020911; US 2002108642 A1 20020815; US 6637445 B2 20031028

DOCDB simple family (application)
EP 01120274 A 20010823; CN 01130871 A 20010830; IL 14500101 A 20010820; JP 2000377785 A 20001212; KR 20010050196 A 20010821; SG 200104981 A 20010817; TW 90121431 A 20010830; US 94085901 A 20010829